Pliant Therapeutics Presents Data from its Bexotegrast Program at the American Thoracic Society International Conference

05-21-2024 at 6:50 PM EDT

SOUTH SAN FRANCISCO, Calif., May 21, 2024 (GLOBE NEWSWIRE) -- Pliant Therapeutics, Inc. (Nasdaq: PLRX), a late-stage biotechnology company and leader in the discovery and development of novel therapeutics for the treatment of fibrotic diseases, today announced that the Company presented clinical data and preclinical data of bexotegrast (PLN-74809) this week as part of the American Thoracic Society (ATS) 2024 International Conference, held from May 17-22, 2024.

“Our 2024 ATS presentations include comprehensive clinical safety and imaging data, as well as preclinical data from our bexotegrast development program that provide further support the late-stage development of this novel therapeutic in our currently enrolling BEACON-IPF trial,” said Éric Lefebvre, M.D., Chief Medical Officer at Pliant Therapeutics.

**Update on the Safety and Tolerability of Bexotegrast, A Dual-selective Inhibitor of Integrins αvβ6 and αvβ1, in Development for Idiopathic Pulmonary Fibrosis and Primary Sclerosing Cholangitis**

In an oral presentation, Gregory P. Cosgrove, M.D., FCCP, Vice President of Clinical Development at Pliant Therapeutics provided an integrated safety and tolerability analysis of bexotegrast across completed studies with unblinded data, including those conducted in healthy volunteers and in patients with idiopathic pulmonary fibrosis (IPF) or primary sclerosing cholangitis (PSC). To date, in unblinded and blinded studies, bexotegrast has been administered to over 700 participants. Across 11 Phase 1 and 4 Phase 2 trials, bexotegrast was well tolerated, most treatment-emergent adverse events being mild to moderate with trial participants experiencing low drug discontinuation rates.

**Bexotegrast Targets TGF-beta Inhibition to Specific Cell Types in the Fibrotic Human Lung**

In a poster presentation, Mahru C. An, Ph.D., Principal Scientist at Pliant Therapeutics, reviewed results from a differential gene expression analysis of bexotegrast in fibrotic human precision-cut lung slices (PCLS) performed at the single cell level. Inhibition with bexotegrast showed a distinct pharmacodynamic profile in fibrotic human PCLS compared with ALK5 inhibition. Bexotegrast targeted reduction of TGF-β signaling, a master regulator in fibrosis, in fibrogenic cells, with reduced effects on other cell types previously associated with TGF-β-inhibition toxicities.

**Post-hoc Analysis of Biomarkers of Intersitial Lung Disease Progression in Participants with Idiopathic Pulmonary Fibrosis Receiving Bexotegrast Over 12-weeks in INTEGRIS-IPF**

In a late-breaker poster presentation, Martin L. Decaris, Ph.D., Senior Director, Translational Sciences at Pliant reviewed results from a post-hoc analysis of biomarkers from the completed INTEGRIS-IPF Phase 2a clinical trial of bexotegrast in patients with idiopathic pulmonary fibrosis (IPF) (NCT04396756). Results showed that seven previously identified plasma biomarkers of interstitial lung disease (ILD) progression were significantly modulated in participants with IPF receiving bexotegrast over 12 weeks when compared to placebo. Further analyses of plasma biomarkers are included as part of the Phase 2b BEACON-IPF trial.

**Evaluation of Quantitative Imaging in a Phase 2a Study for the Treatment of Idiopathic Pulmonary Fibrosis with Bexotegrast (INTEGRIS-IPF)**

In a poster presentation, Jonathan G. Goldin, M.D., Ph.D., Professor of Radiology, Medicine and Biomedical Physics at the David Geffen School of Medicine at the University of California, Los Angeles reported bexotegrast’s antifibrotic effects on quantitative imaging parameters as part of the completed INTEGRIS-IPF clinical trial. At Week 24, in patients with IPF of whom a majority were also receiving background therapy, a reduction in the progression of quantitative lung fibrosis (QLF) extent was observed with bexotegrast 320 mg versus placebo. In addition, no notable increases in alveolar inflammation were observed in bexotegrast-treated patients, as measured by quantitative ground glass (QGG).

**About Pliant Therapeutics, Inc.**

Pliant Therapeutics is a late-stage biopharmaceutical company and leader in the discovery and development of novel therapeutics for the treatment of fibrotic diseases. Pliant's lead product candidate, bexotegrast (PLN-74809), is an oral, small molecule, dual selective inhibitor of αvβ6 and αvβ1 integrins that is in development in the lead indications for the treatment of idiopathic pulmonary fibrosis, or IPF, and primary sclerosing cholangitis, or PSC. Bexotegrast has received Fast Track Designation and Orphan Drug Designation from the U.S. Food and Drug Administration (FDA) in IPF and PSC and Orphan Drug Designation from the European Medicines Agency in IPF and PSC. Pliant has initiated BEACON-IPF, an adaptive Phase 2b/3 trial of bexotegrast in IPF. Pliant is conducting a Phase 1 study for its third clinical program, PLN-101095, a small molecule, dual-selective inhibitor of αvβß and αvβß1 integrins, that is being developed for the treatment of solid tumors. In addition, Pliant has received regulatory clearance for the conduct of a Phase 1 study of PLN-101325, a monoclonal antibody agonist of integrin α7ß1 targeting muscular dystrophies.

For additional information, please visit: www.PliantRx.com. Follow us on social media: X, LinkedIn, Facebook and YouTube.